

SHINER

PRODUCT CATALOGUE

PLASTICS
OPTIC FIBER
LIGHT PIPES



SHINER
FIBER OPTICS CO., LTD.

shiner-fiber.com.tw

COMPANY PROFILE

SHINER FIBER OPTICS Co. Ltd was founded in 1987 and our company first started as Telecom engineering technics. In 1993, in order to meet the government's need (Statute for upgrading industry), SHINER FIBER decided to transform into Fiber Optic products for the lighting marketplace. In 1994, our company cooperated with Industrial Technology Research Institute (Acrylic Optical-Fiber development plan) and with the help of all the fellows from Chemical

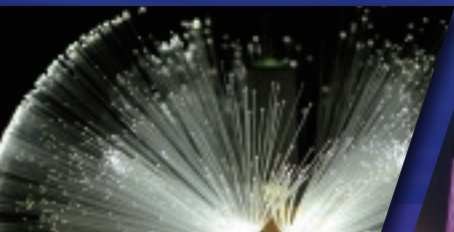
Engineering Institute, Shiner Fiber company was recommended by the Promotion Committee of Hsinchu City. After 2 years (1996), Our company became the first Optical Fiber lighting manufacturer in Taiwan. Shiner Fiber company dedicated to invent all kinds of POFLPS (Plastics Optic Fiber Light Pipes). In the year of 2011, super bright POFLPS was developed successfully.

Fiber optic products are indispensable nowadays as well as in the future. In a state of network without borders, Shiner Fiber Optics company aims to create better quality living to our customers as well as to find ways that advance their lives.

Due to the current energy crisis these days, it is essential to make a good use of different kinds of materials and current resources in order to discover new energy and to save energy.

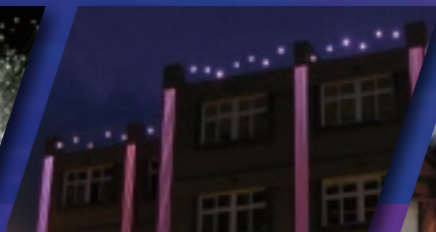


- various end/ side light fibers produced
- fiber optic products design
- various plastic fibers produced
- decorative illumination in building and other application design
- LED products produced and design
- customized optical fiber products produced and design



1993

- End light plastic fibers



1996

- long distance and big diameter fiber system



1998

- Multi-strand side glow fibers



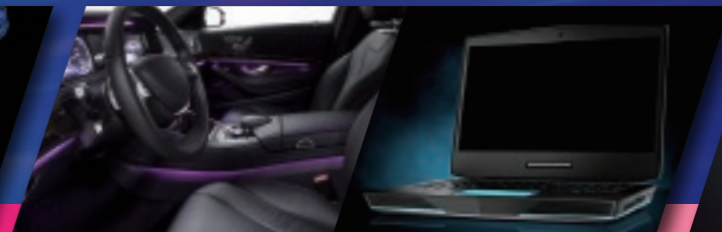
1999-2010

- project design and planning
- electronic materials applied



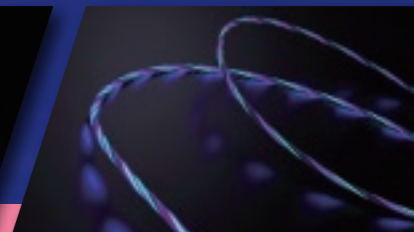
2011

- super bright plastic fibers produced



2012-2020

- car decorative optical fiber products
- 3C-related products 、graphics cards 、computers 、laptops 、 bikes, etc.
- ISO 9001 implementation
- moved to new office building



2021-

- New light guide material



Side Light Series

PLASTICS OPTIC FIBER LIGHT PIPES

POFLPS

PLASTICS OPTIC FIBER LIGHT PIPES

Optic fibre consists of a solid core and cladding. The solid core is made from a specialized elastomeric material, while the cladding is made from a flourine polymer. POFLPS are easy to wiring, as they have excellent felxibility and simplicity of the end surface treatment.

Specification

Bend radius

Appearance as light emitting

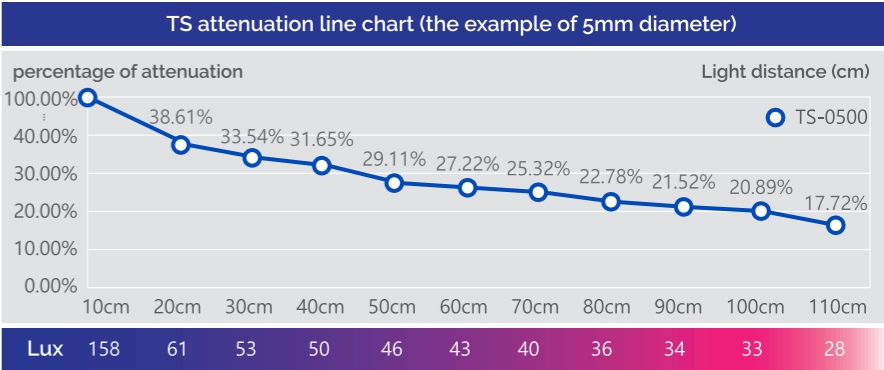
Ambient temperature

Physical properties

outer jacket - fluorine polymer , Color - Clear ,
Solid core- high polymer
5~8 times of cable diameter
side glow
-45°C~90°C

Light is transmitted over the entire length of the cable without electricity or heat with the illuminators placed at both ends of flexible plastic fibers. It's suggested that using a maximum of 2 meters to ensure quality lighting and optimum performance.

Style No.	Diameter (mm)
TS-0140	1.4
TS-0200	2.0
TS-0300	3.0
TS-0350	3.5
TS-0400	4.0
TS-0500	5.0
TS-0600	6.0
TS-0800	8.0



TSS

POFLPS

PLASTICS OPTIC FIBER LIGHT PIPES

Optic fibre consists of a solid core and cladding. The solid core is made from a specialized elastomeric material, while the cladding is made from a flourine polymer. POFLPS are easy to wiring, as they have excellent felxibility and simplicity of the end surface treatment.

Specification

outer jacket - fluorine polymer , Color - Bright ,
Solid core- high polymer

Bend radius

5~8 times of cable diameter

Appearance as light emitting











side glow

Ambient temperature

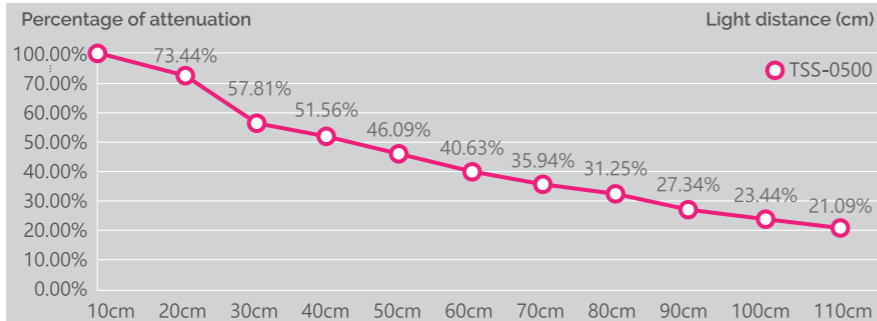
-45°C~90°C

Physical properties

Light is transmitted over the entire length of the cable without electricity or heat with the illuminators placed at both ends of flexible plastic fibers. It's suggested that using a maximum of 2 meters to ensure quality lighting and optimum performance.

Style No.	Diameter (mm)	
TSS-0140	1.4	
TSS-0200	2.0	
TSS-0220	2.2	
TSS-0300	3.0	
TSS-0350	3.5	
TSS-0400	4.0	
TSS-0500	5.0	
TSS-0600	6.0	
TSS-0800	8.0	
TSS-1000	10.0	

TSS attenuation line chart (the example of 5mm diameter)



Lux	128	94	74	66	59	52	46	40	35	30	27
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TW

Side Light Series

POFLPS

PLASTICS OPTIC FIBER LIGHT PIPES

Optic fibre consists of a solid core and cladding. The solid core is made from a specialized elastomeric material, while the cladding is made from a flourine polymer. POFLPS are easy to wiring, as they have excellent felxibility and simplicity of the end surface treatment.

Specification

outer jacket - fluorine polymer , Color - White ,
Solid core- high polymer

Bend radius

5~8 times of cable diameter

Appearance as light emitting

side glow

Ambient temperature

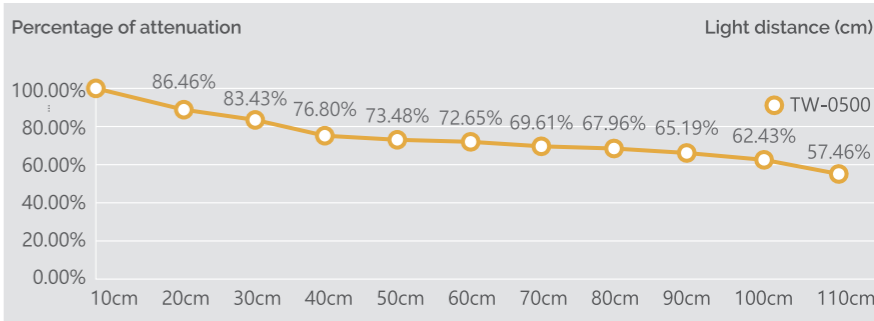
-45°C~90°C

Physical properties

Light is transmitted over the entire length of the cable without electricity or heat with the illuminators placed at both ends of flexible plastic fibers. It's suggested that using a maximum of 2 meters to ensure quality lighting and optimum performance.

Style No.	Diameter (mm)	
TW-0200	2.0	
TW-0220	2.2	
TW-0300	3.0	
TW-0350	3.5	
TW-0500	5.0	
TW-0600	6.0	
TW-0630	6.3	
TW-0800	8.0	
TW-1000	10.0	

TW attenuation line chart (the example of 5mm diameter)

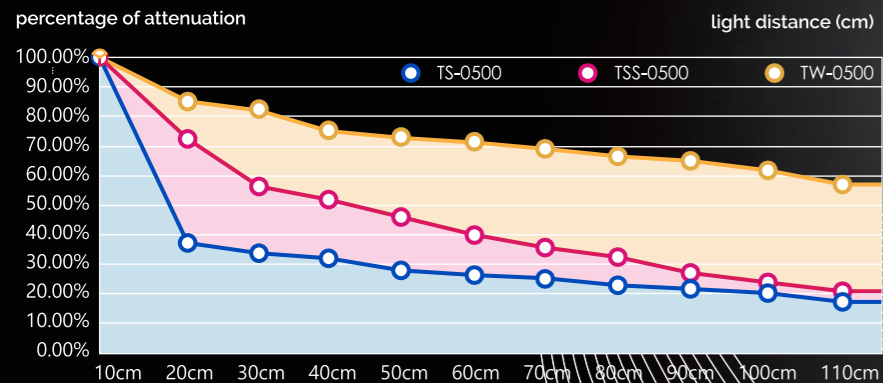


Lux	36.2	31.3	30.2	27.8	26.6	26.3	25.2	24.6	23.6	22.6	20.8
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PRODUCT COMPARISON

The illustrations of
TS 、TSS 、TW with and without lights

The comparison of TS 、TSS 、TW attenuation



TW

TSS

TS

LGC

POFLPS

MULTI-FIBER LIGHT GUIDE CABLE

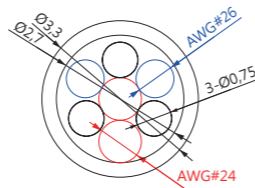
LGC consists of UL cables, POFLPS and the protective cladding. The inner layer of the light pipe is made from special light guide PMMA while the cladding is made from fluorine polymer. LGC has the effect of transmitting power and light.

Structure of the product

- LGC structure shows as follows:

LGC consists of 2 UL AWG#24, 2 AWG-#26, and 3 plastic optical fiber light pipes with an outer diameter size of 0.75mm twisted together and cladded with fluorine polymer material.

Sectional view of LGC as shown below



Physical properties

Remarks: There will be no notice if any specifications change.

Features	
—	With function of standard power cable.
—	Flexible and bendable.
—	Power cables comply with UL rules and regulations.
—	With the brilliance of optical fiber light guide.
—	The numbers of cable cores are customized.

Dimension		Size tolerance	Style No./ Description
Outside diameter (mm)	3.3mm	±0.2	LGCφ3.3±0.2mm AWG#24 and AWG#26 cables comply with UL rules and regulations.
	LGC color (without lights): white Cables can be colorful in the control of RGB LED lights.		
Cut Length	Customized length as requested		

LGP

POFLPS

MULTI-FIBER LIGHT PIPE

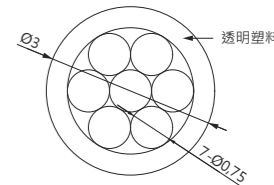
LGP consists of multiple plastic optical fiber light pipes and protective cladding. The inner layer of the light pipe is made from special light guide PMMA while the cladding is made from fluorine polymer. LGP has the effect of transmitting light.

Structure of the product

- LGP structure shows as follows:

LGP consists of 7 POFLPS with a diameter of 0.75mm and protective cladding.

Sectional view of LGP as shown below



Physical properties

Remarks: There will be no notice if any specifications change.

	Dimension	Size tolerance	Style No./ Description
Outside diameter (mm)	3.0mm	±0.2	LGP consists of 7 POFLPS with a diameter of 0.75mm and protective cladding.
Length	Semi-transparent white Cables can be colorful in the control of RGB LED lights.		
	Customized length as requested		

This is a RoHS compliant product.

Instructions

1. Please check up every factors that may change the features of LGP. There will be some differences under different methods and conditions.
2. It is bendable.
3. Please make sure the light sources are in good condition.
4. This product cannot be overstretched, over bent or overloaded. These are the possibilities that may cause appearance flaws.
5. To protect the outer cladding, please avoid any sharp objects which may cause appearance flaws.
6. Please keep the products in the normal temperature environment.

POFLPS LIGHT GUIDE CABLE

LGL consists of one power cable, a light pipe layer made from a specialized elastomeric material, and protective cladding. The cladding is made from fluorine polymer. LGL has the effect of transmitting power and light.

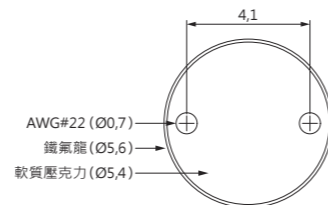
Features

- With functions are the same as standard power cables
- With the brilliance of optical fiber light guide
- Flexible and bendable.
- The numbers of cable cores are customized.
- Power cables comply with UL rules and regulations.

Specification of LGL

- The outer layer is made of Bright Fluorocarbon resin. In the second layer of LGL, there is a light-guiding resin.
- LED lights need to be placed at both ends of the cables.
- The UL1332 AWG-22-2C power cable is placed in the middle of the product.

LGL structure shows as follows:



Physical properties

Remarks: There will be no notice if any specifications change.

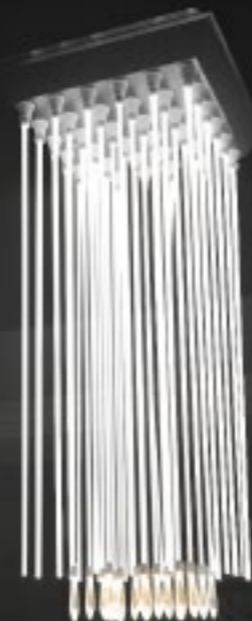
	Dimension	Size tolerance	Style No./ Description
Outside diameter (mm)	6.0mm	±0.2	LGLφ6.0±0.2mm
			AWG22-2C cables comply with UL rules and regulations.
Length	LGL color (without lights): Bright		
	Cables can be colorful in the control of RGB LED lights.		
	Customized length as requested		

Instructions

- Please check up every factors that may change the features of LGL. There will be some differences under different methods and conditions.
- It is bendable.
- Please make sure the light sources are in good condition.
- This product cannot be overstretched, over bent or overloaded. These are the possibilities that may cause appearance flaws.
- To protect the outer cladding, please avoid any sharp objects which may cause appearance flaws.
- Please keep the products in the normal temperature environment.

This is a RoHS compliant product.

PRODUCT APPLICATIONS



PRODUCT APPLICATIONS



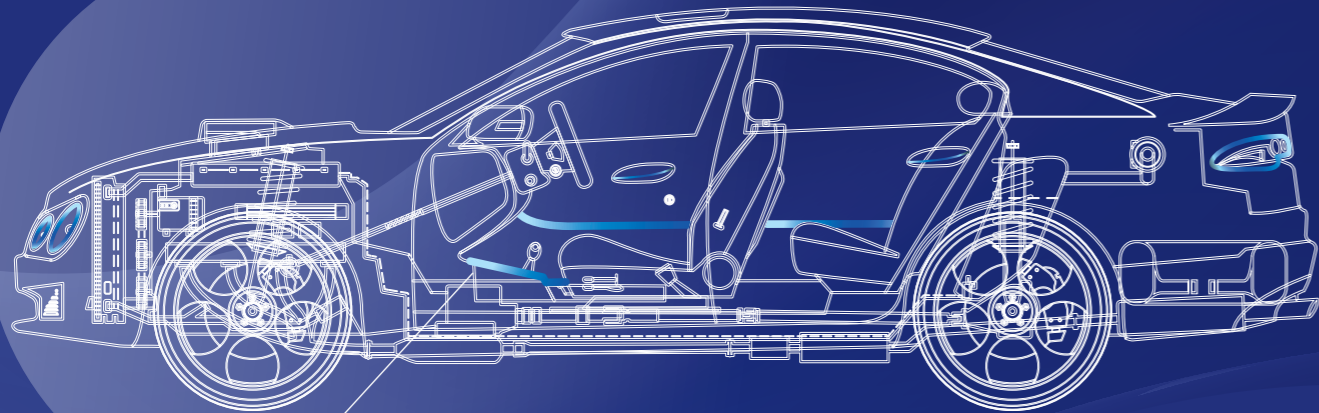
Backpack lighting

Caplighting

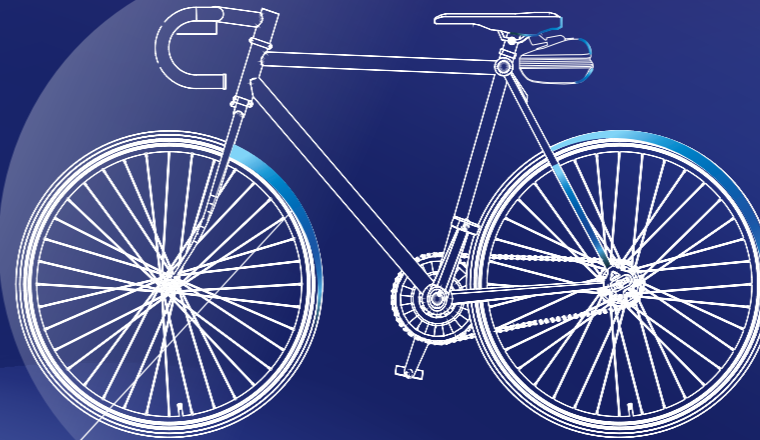
Safety vest lighting

Various clothing lighting

PRODUCT APPLICATIONS



• Car decorative lighting



• Safety bike lighting



• Dazzling 3C lighting



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